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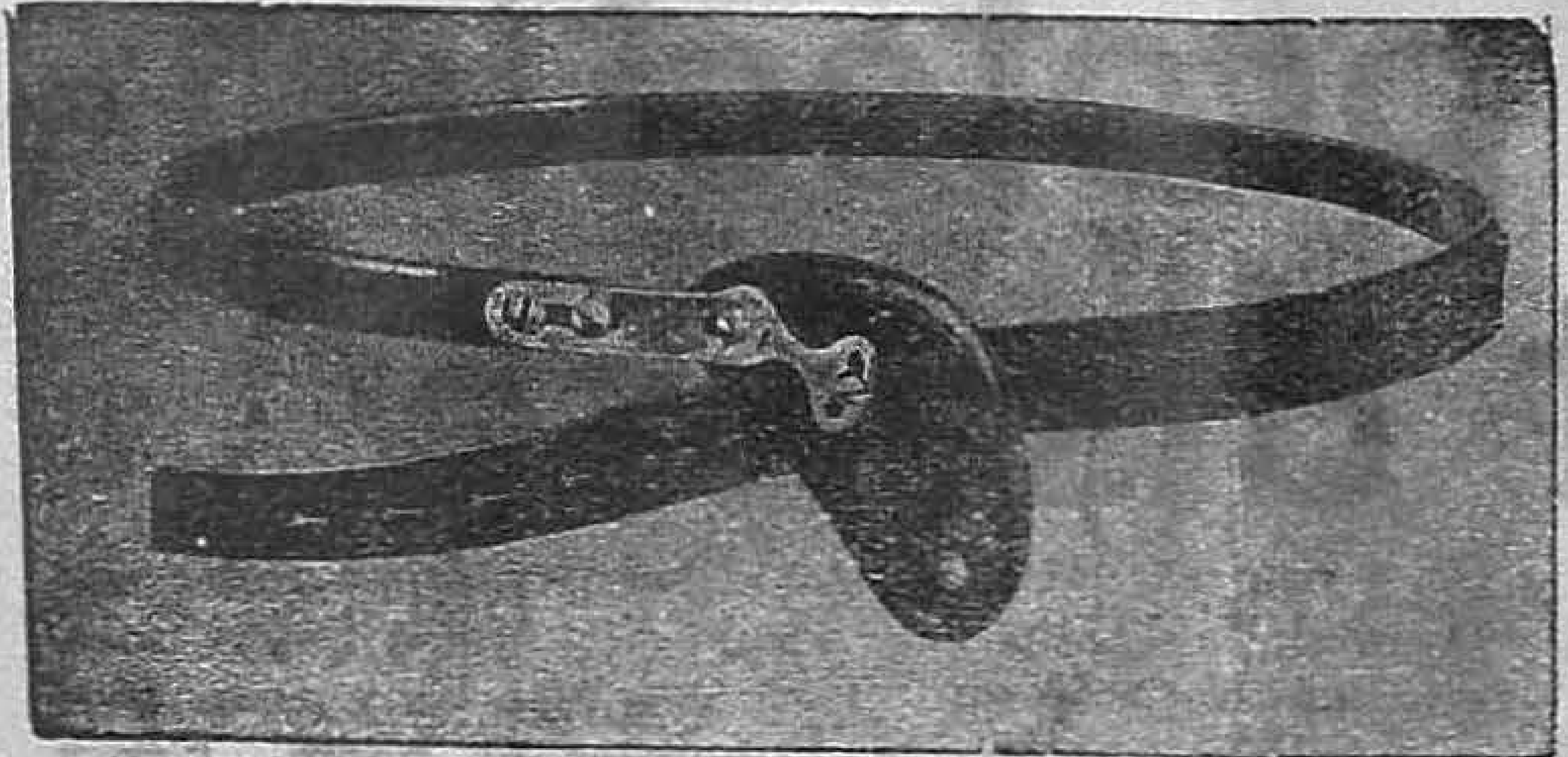

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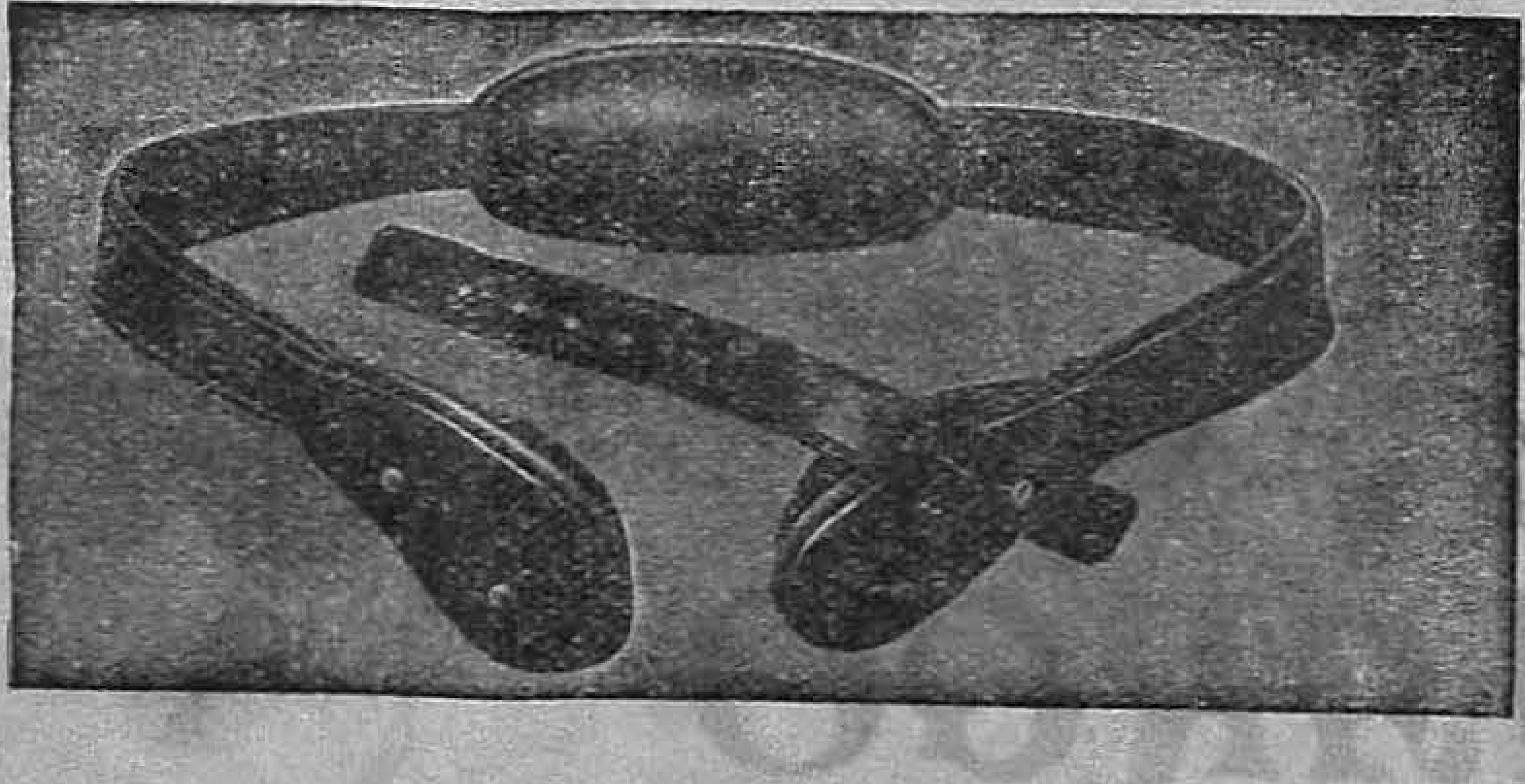

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Editorial

The Milk Problem in India

FROM pre-historic times, the value of milk, as an important article of diet has been universally recognised. Milk was all along considered as a perfect and wholesome food and nutritional experts have now declared that it is also a protective food. That milk is a protective food was perhaps also known to Ancient Hindus. According to Hindu Mythology, seven important liquids constituted the food and drink of human beings, *viz.*, milk, curd, honey, sugar-cane juice, salt-water, fresh water, and toddy. These were described, metaphorically, no doubt, as seven oceans and the ocean of milk was the most sacred of all. Any large expanse or anything that is widely distributed may be likened to an ocean. This Ocean of Milk was said to be the abode of Lord Vishnu, the protector of the Universe. Stripped of its allegory, it means that milk is the protector of human beings in the Universe, or in Modern Scientific Phraseology, a protective food. The ocean of milk was churned and many products emerged therefrom—Lakshmi, the goddess of wealth, Moon, the pleasure-giver, Amrut, the life-sustainer and Poison, the destroyer. In common parlance, it may be interpreted that the milk products such as curd, butter, ghee etc., will give you wealth, happiness and longevity and, if consumed in excess, will also prove your poison. Again, Lord Vishnu Himself, was said to have been born or rather brought up in the family of 'Yadavas' where, by example and precept, He

drank milk and ate butter to His heart's content and became so strong and powerful, both physically and mentally, that he was able to successfully resist and overthrow his enemies and give to the world, a precious intellectual gift in the "Bhagavat-Gita". The value of milk was thus once more emphasized and brought home to the people. Cow was held in great veneration in our country from time immemorial and the gift of a cow was considered the most valuable gift which one could offer and was worth more than land and money-gifts. Verily, India was, in olden days, a land flowing with milk and honey.

What is the position of India at the present day with regard to its milk-supply and how has it affected the health of her population? These are questions which we would like to answer, by means of suitable quotations from authoritative pronouncements made by nutritional experts and experienced statesman. Dr. W. R. Aykroyd, Director of Nutrition Research, Indian Research Fund Association, observed, at a meeting of the Indian Science Congress held at Hyderabad (Deccan) in January last, as follows :—

"On the qualitative side, typical Indian dietaries show serious deficiencies. There is a relative lack of animal products such as milk, eggs and meat, of fish, and also of pulses, vegetables and fruits. Experiments had shown that the addition of small quantities of skimmed milk to the diet of typical Indian children living on a largely cereal diet, containing no milk or egg, produced a rapid acceleration of growth and improvement in general health and vitality. It seems probable that the most serious fault of the average Indian dietetics is their relative lack of one or more of the food factors contained in skimmed milk—Proteins of high biological value, Vitamin B_2 and assimilable calcium. Probably no food of vegetable origin will supplement average Indian diets as effectively as milk or eggs".

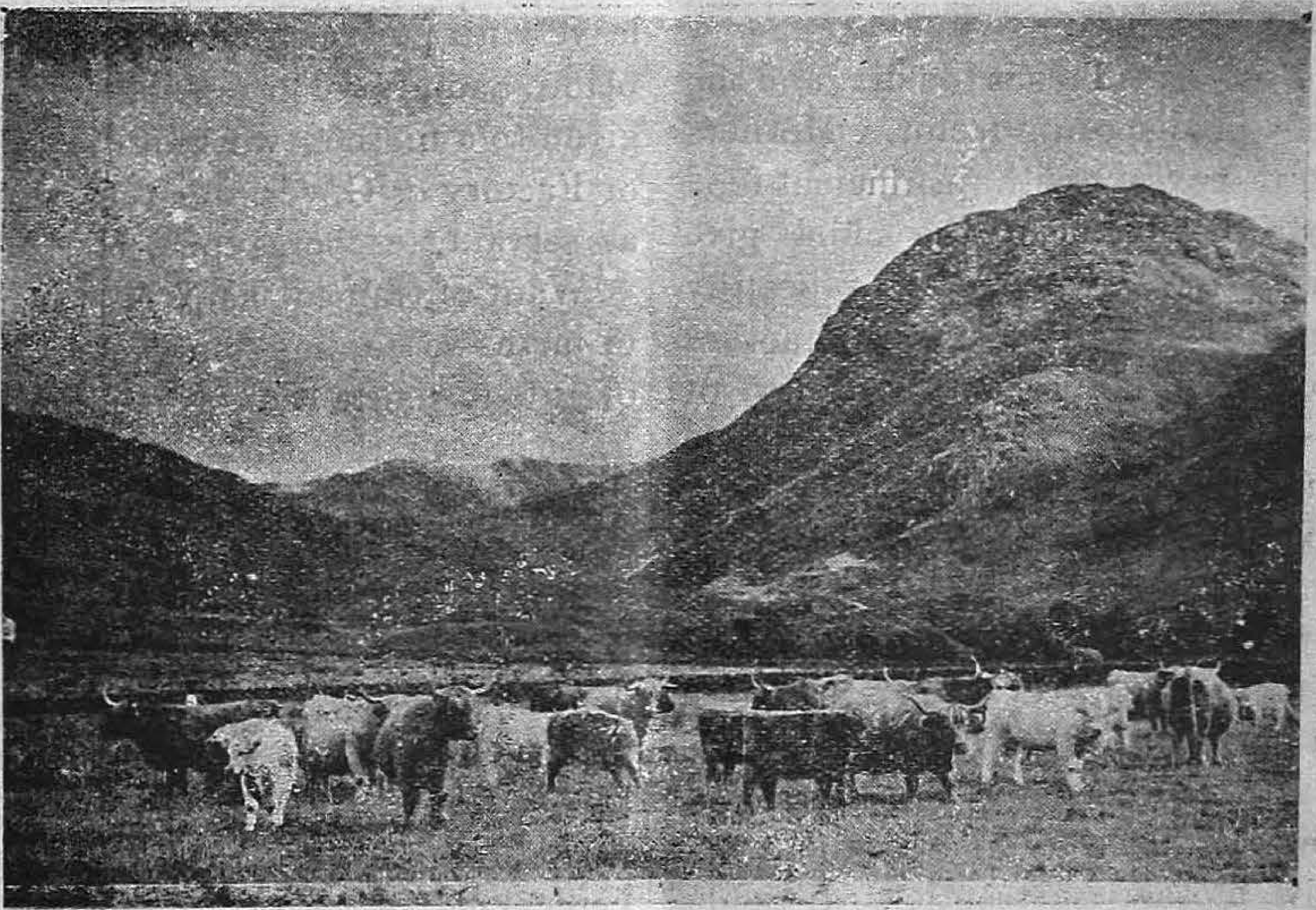
How this mal-nutrition has affected the health of the people of India has been graphically described by the Hon. Sir Jagadis Prasad, member for Education, Health, and Land, Government of India, on the occasion of the inauguration of the Central Advisory Board of Health at Simla recently, in these words :—

"Medical Research workers and the Medical Adviser to the Government of India have warned us that in the matter of health, India is "in a state of grave emergency". The increasing prevalence of Malaria, Tuberculosis and other diseases associated with undesirable environmental conditions and mal-nutrition point to steadily deteriorating condition of life. Small wonder that the prevalence of disease in India is regarded abroad as a menace to the rest of the world".

Now what is the remedy for this state of affairs? H. E. The Viceroy, Lord Linlithgow is no doubt taking very keen interest in establishing in the public mind 'the essential relationship between the life of the plant, the life of the animal and the life of man; in other words, the direct connection between agricultural progress, improved animal husbandry and human welfare, nutritional and economic". Steps are no doubt being taken by the Government of India, in furtherance of this object, to increase the output

of agricultural produce, to improve the condition of live-stock, to conduct more research on nutrition and to carry on whirl-wind propaganda among the masses. But to a poor peasant, an adequate diet is a matter of rupees, annas and pies, more an economical problem than a nutritional one. The cultivator of small capital, is not interested in expensive processes.

What the Indian peasant really needs now are : (1) Relief from indebtedness : (2) Money for agricultural operations and for purchase and maintenance of proper live-stock etc.; (3) Good sale for his produce and (4) Low rent for lands. Col. Oliver, Animal Husbandry expert, in opening the discussion at the Science Congress referred to above, stressed the need for every cultivator keeping and maintaining properly, mainly on fodder crops grown on his land, at least one good cow. He could thus produce, he said, more and better milk, more manure and better work animals. He deprecated the idea of relying too much on free grazing for the maintenance of live-stock. Hitherto, the forests were set apart for grazing and there were common pasture lands besides, in every village. The cattle were then well-fed and the yield was also good. The forests have since become prohibited areas and the common pasture lands have slowly disappeared and have been converted into arable lands. The Animal Husbandry Expert's suggestion to grow fodder on one's own land is impracticable, in view of the fact that most of the holdings are fragmentary and there is hardly enough land to raise food for human beings. Unless, therefore, forests are thrown open for free-grazing, sufficient number of cattle cannot be maintained, more milk cannot be obtained and the milk problem of India will remain for ever an unsolved problem.



Cows grazing under hygienic conditions in hills and forests are always strong and healthy.

Infant Mortality in India— The Causes and Prevention

By U. Venkata Rao,

Medical Practitioner, "Sudarsana" Madras.

THE growth and prosperity of a Nation depends on the infants born. The more civilized the country is, the less, the infant mortality. But in our country half the population die before reaching ten years—that is, half the population born, die before they are of any use to the country.

The causes are :—

1. *Poverty.*—This is the first and the greatest predisposing factor. Mothers living in poverty with insufficient food prior to the birth of the child give birth to infants who are less healthy and puny. Poverty makes the mother go to work almost upto the day of confinement and if she has to do manual work, the baby is often born premature—a small, unhealthy child. If the mother is thin and ill-nourished the new born baby is in many cases thin and below the average. Naturally such ill-nourished and feeble children succumb to diarrhoea, broncho-pneumonia etc. Therefore, health to a prospective mother is essential. In addition our social custom of indifference to expectant mothers often produces disastrous results. So, to prevent infant mortality, proper ante-natal care of the mother is essential.

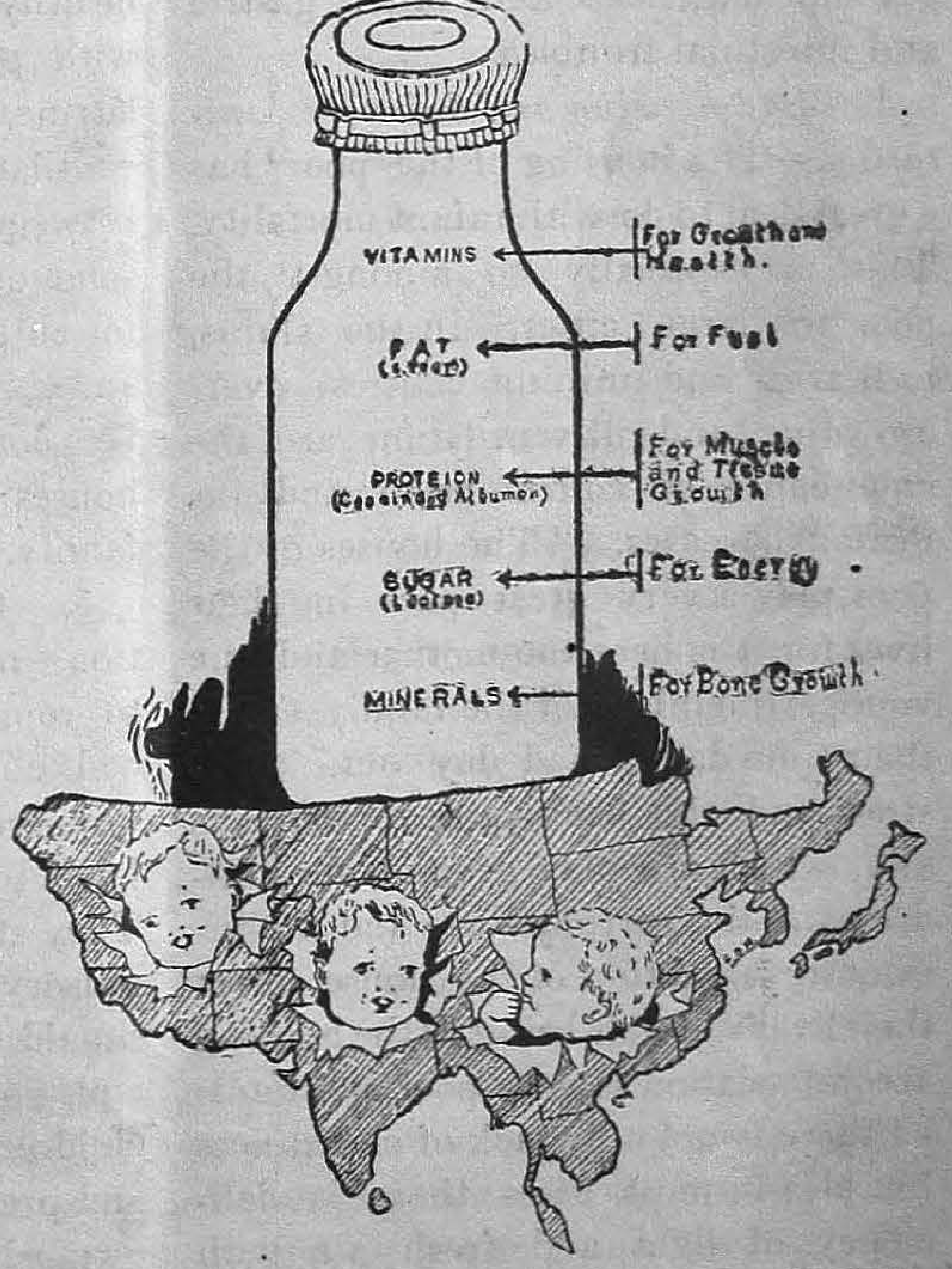
Soon after confinement money again worries the mother. Poverty frequently compels her to go to work too soon to supplement her husband's wages to enable them to live better. As soon as the mother begins to go to work, the baby has to be weaned partially at first while she is at work and very soon altogether and left in charge of an old grandmother or with some young girl of the family. Thus the root cause of infant mortality especially in India, is Poverty. There should be early compulsory Legislation, that leave with pay for a month and a half before and after confinement must be given to a mother working in a Mill or Factory or Government Institution as servant, teacher, typist, etc.

Want of trained help at the time of birth is another important cause of infant mortality. In many cases especially in the rural parts, an ignorant barber midwife or so called experienced old woman attend to the delivery. "Her ignorance, her aggressive methods, her dirty habits and above all her hereditary influence in all ranks of Society are only too well known". She has no knowledge of Sepsis or Asepsis. A fairly large percentage of deaths of infants are due to her meddlesomeness and another proportion to the injury or disease she implants on the mother.

2. *Lack of proper management on the part of the mother in the management of the infant.*—Mother is the natural guardian of the child. The infant's chance of living depends much upon the mothers' care and proper feeding. With a few exceptions here and there, the mothers do care and are anxious to rear their children well. There is no wilful

neglect. If anything goes wrong with the child, it is due to the ignorance of mothers. In Northern India the child is in the habit of receiving opium regularly. Some do it as a long standing practice in their family and others give it because the mother is advised by her friends and relatives. It is given to quieten the child to enable the mother to do her household duties or work for her grub. So also in South India, castor oil is given regularly.

3. *Improper Feeding.*—Mother's milk should be the only food for the baby for the first nine or ten months of its life. Fortunately in India the majority of mothers suckle their babies. But most of them do not know how to nurse the babies in the best way. They should see that the baby has an abundant and satisfactory supply. No special feeding of the mother is required. A good healthy appetite and plain simple food will enable the mother to nurse her baby. But she must take more fluids to make up for what is given out through the breasts and for this plain water or barley water is good. She must have a reasonable amount of nourishment, must avoid constipation and must not be over-worked and should pay attention to the condition of the nipples. The feeding must be regular. The child ought not to be taken to the breast whenever it cries. This is not the remedy to still the cry. Irregularity of feeding is injurious both to the mother and child. The mother thinks that, whenever the child cries, it must be fed as if crying is due to hunger. Hunger and thirst have the same remedy—Milk. Water is not given to the child even in the hottest weather, as it is considered harmful. The mother feeds the child with her milk immediately it begins to cry. She does not care to know how often she feeds and at what intervals. Often if the mother is ill-nourished or ill-developed, the child is fed with cow's or buffaloe's milk from the first month in addition to mother's milk. The mother thinks all milk is alike. No modification is considered at all excepting dilution with water. The amount of milk given is regulated by the cry of the child and is left to the imagination of the mother. Instead



Good and adequate Milk means reduction in Infant Mortality.

of adding cream, the cream is removed by boiling the milk. Cleanliness is least thought of. The vessel containing the milk may or may not be covered. Flies may be running about the milk pan and one or two may even fall into the contents and mother usually removes it by her fingers. In some well-to-do houses feeding bottles are used, but the nipples and bottles are not well cleaned as per instructions. Nipples are not replaced till they are torn or worn out. Often, between the feeds the infant has a rubber teat in the mouth to suck. If the teat slips to the ground anywhere, it is simply picked up and thrust into the mouth again often without even wiping, much less washing. The child may thus be exposed to grave dangers and devitalized every day. At any time it may develop diarrhoea and other gastric and intestinal troubles.

4. *Bad housing and defective sanitation.*—The housing of the poor has a great deal to do with infant mortality. This is especially so amongst the poor in large cities. In the slums, mill areas and mining centres, overcrowding and ill-ventilation are the chief causes of consumption and infectious diseases. "The houses of the poor play a very great part in their lives for it is here the mother and the younger members of the family spend their time day in and day out." The street and the back-yard if there is any, which are play grounds for children and the surroundings and the insanitary condition of the house affect their lives and well-being. If the housing accommodation is very poor and limited there is not only lack of cleanliness but also in most cases there is deficiency of light and fresh air with pollution of the soil and water and a rapid and easy spread of infectious diseases. In villages, where there is plenty of accommodation available, the poor dwelling houses are constructed without any windows, and with a low small door which is also usually almost shut. So that, fresh air and sunlight cannot get inside the dwelling. To prevent infant mortality there is an urgent need to improve the housing conditions of the poor.

The Local and District Boards and Municipalities should spend money in constructing Model houses with good drainage and roads. Even in large towns the poor localities are as bad as ever. Money is largely spent in maintaining roads and drains in localities of the well to do people—the poor localities are uncared for. The slums are to be cleared and rehousing in healthy surroundings is badly needed, with good roads, drains and pucca latrines. Small houses with proper ventilation should be constructed and between each house there should be some open space for ventilation and for children to play. The mill owners and industrial magnates should be compelled to provide suitable houses for their workmen and their family.

5. *Want of Education.*—Education—mass education is badly needed to remove the insanitary habits and odd customs of the people and to improve the inability of women in India to appreciate the new methods. They should have at least free compulsory primary education. Mothers should be taught the elementary principles of hygiene and management of children in their own mother tongue and preferably through some of their own educated people. Child Welfare Centres, Health visitors, trained mid-

wives are all possible only for cities with over 10,000 people.

Whatever measures are taken by the Government or Local Bodies or Philanthropic Societies, it is all useless until the people are educated and they co-operate. One cannot force preventive measures on an unwilling people any more than we can compel a horse to drink merely by bringing it nearer to the water.

Besides these main causes there are many other factors in India for infant mortality to be considered as rigorous Purdah System, Child Marriage, Early Marriage, Illegitimacy, congenital Defects, Hereditary Influences etc.

Hook - Worm Disease

—By Dr. L. R. Fernandez,—
Trichy.

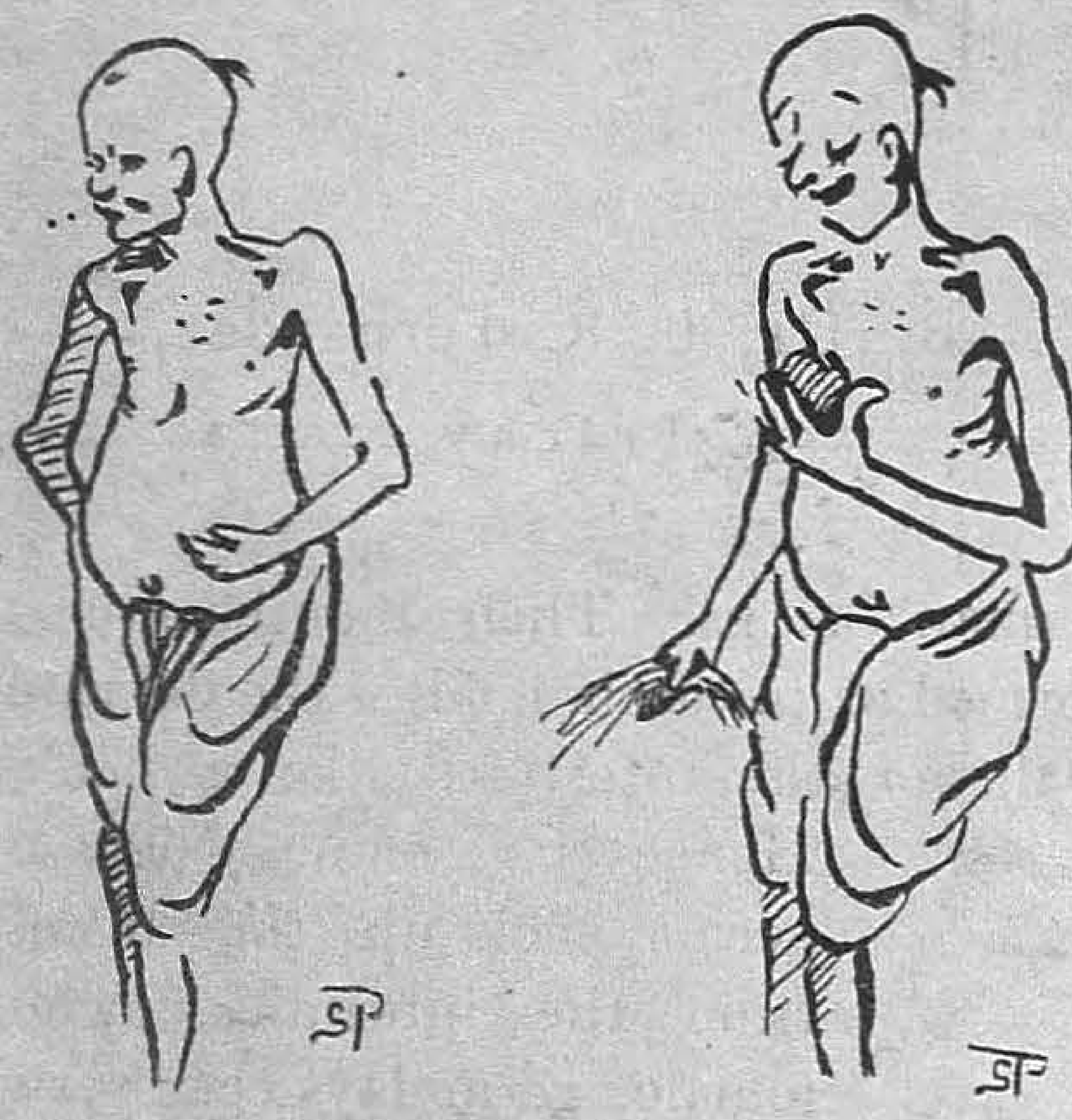
In several districts of the Madras Presidency, Burma, Ceylon and Federated Malay States, many people are victims to Hook-Worm disease, otherwise called Ankylostomiasis. This troublesome disease is caused by a tiny germ called " ankylostoma duodenale " which is not at all visible to the naked eye, but can be seen through the help of a microscope to be of ½ inch in length. Ankylostoma germs live in bunches in the intestines of human beings. Their mouths are so formed as to catch hold of the delicate walls of the intestines like a hook. Hence its name. These germs suck up the blood from the intestines. The female germ lays eggs very often which are deposited on the river banks and latrines whenever human excreta are passed. These eggs or ova get mixed up with the sand and undergo some changes before they are hatched. The fully developed germs find their way into the rivers, lakes, ponds etc., and thence into the intestines of man when he drinks the water.

1. 2.

1. *Hookworm in the person's bowels, taking hold of the lining with its mouth and hanging on without molestation.*
2. *Hookworm clinging to the person's skin, when his feet or hands come into contact with it.*

A knowledge of the signs and symptoms of this disease will do good to the Public at large, because even into the most unsuspected families these germs gain entrance and play havoc to their lives, if they are not properly diagnosed and treated in time. Those who are affected by these germs have a pale, bloodless skin, often of earthy colour.

Some of them have no taste for food, however palatable it may be; others have voracious appetite. Languor, lassitude and inability to exert themselves and do some work will be a marked feature of this disease. Invariably the liver and spleen get enlarged and the abdomen may be



3. 4.

3. Hookworm makes the person's blood become thin and watery and not as red as it should be, making his skin look pale and sick.

4. Persons affected with hookworm disease develop strange tastes and eat such indigestible things as lime, raw rice, dirt, charcoal, hair and feathers.

protruding. Swelling of the hands and feet may appear. Occasionally there is slight rise of temperature for a number of days so as to give a suspicion of Tuberculosis. Some get a perverted appetite and eat even clay, charcoal, sand, chalk etc. Diarrhoea or loose motions, dysentry etc. are not uncommon.

In this disease, the preventive treatment is the most important. It must be remembered that prevention is better than cure. As the disease spreads through contaminated water, care must be taken not to pollute the water and wash clothes etc. near the wells and rivers from which water for cooking purposes is taken. This precaution is very often neglected in both villages and towns. In villages people are in the habit of passing stools near the rivers and tanks. What a harmful practice this is! In places where hook-worm disease is prevalent, water must be boiled, strained with a thin cloth and then drunk. Before taking food, care must be taken to wash the hand, feet and face, so that the sand particles and dust lurking within the finger nails may not contaminate the food. Many labourers and coolies in the estates rush to feed themselves directly from the place of their work without washing their hands. It is advisable not to walk bareforted in areas infected by hookworms. The legs and feet ought to be protected by boots or shoes. Finally the Government, Municipalities, Doctors and all the Journalists interested in the health and welfare of the nation, by means of press and platform, ought to enlighten the masses on the dangers of such contagious diseases and the ways and means of preventing them. If the public also cooperate with them, no doubt, hookworm disease can be eradicated from our fair land.

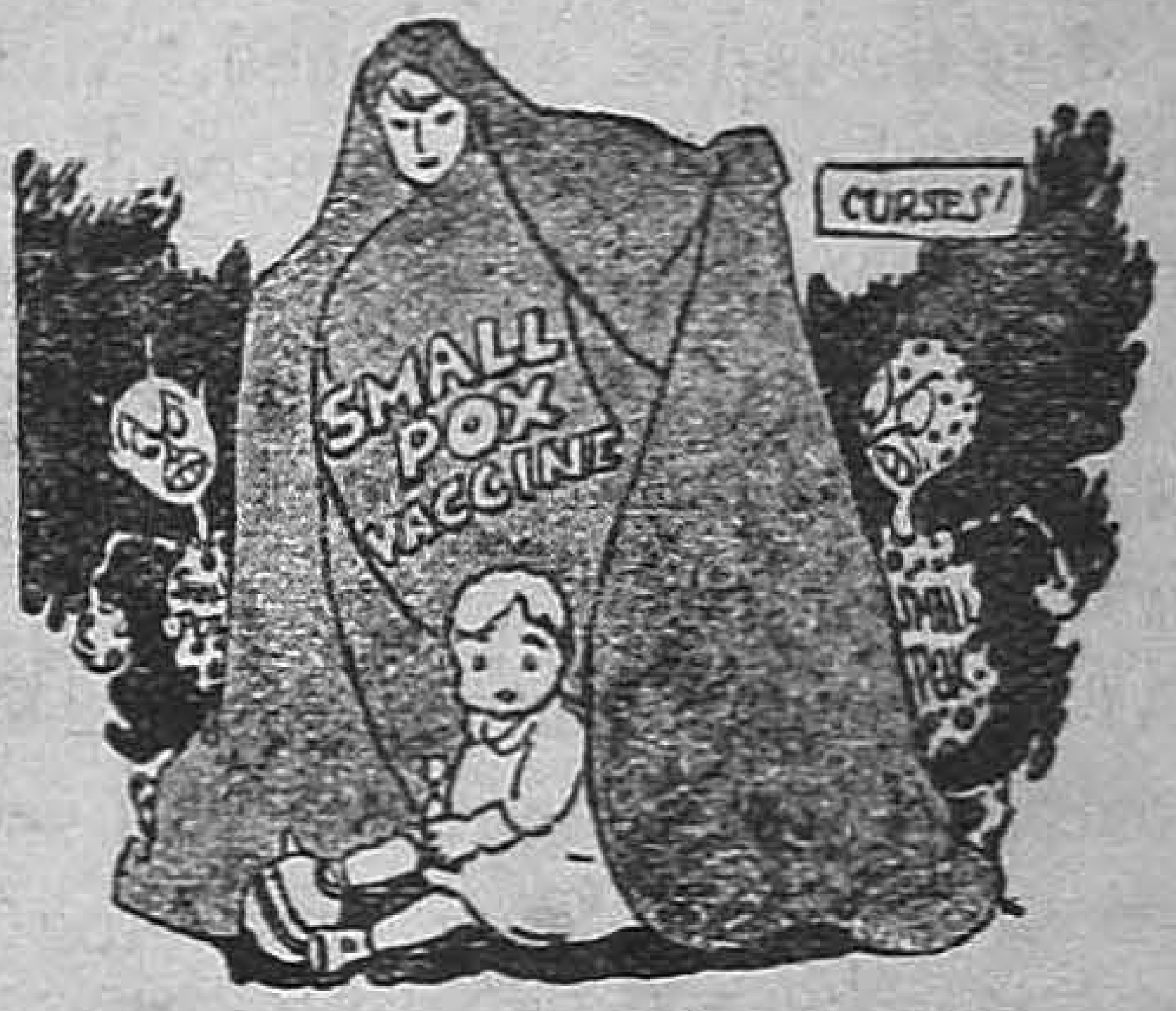
Small-pox and its prevention

—By Dr. B. Mohanrangam,—

—Physician and Surgeon Trichinopoly—

SMALL-POX or variola is one of the worst diseases of our country from which deaths are increasing day by day. There have been so many ways tried with a view to preventing small-pox but to no purpose. For the sake of health, and the readers of Health, I contribute this article and I believe it will be useful and serve as a warning to all those who want perfect health. Small-pox is a contagious, eruptive fever generally known to all.

The sick room should be spacious and well ventilated; bed and clothes of the patient should be changed every time. Shivering, drowsiness, nausea often vomiting, pain in back and loins are the early symptoms of the disease. Pulse is full and bounding and increases according to the degree of fever. Eruptions occur about the third or fourth day. They first appear on the forehead and face and then extend all over the body. The temperature falls as soon as the eruptions appear. To prevent bedsore of the patient, sponging with tepid water should be done daily. Food should consist of fruits, barley water, and milk at regular intervals. It is a very common impression that small-pox is a divine infliction and some people say that no medicine should be taken at that period. But science and statistics do not confirm such impressions. It is absolutely necessary, that proper treatment should be taken beforehand to ensure a halthy recovery. Small pox becomes very dangerous when it is neglected and cases are not rare in which many are carried off simply for want of proper treatment. The incubation period of this disease extends from ten to fourteen days. In worst cases the pustules are thick and almost join one another. In such circumstances fever may reappear with delirium and the patient may die suddenly. Although its cure is not practicable, its prevention is possible



Smallpox Vaccination Protects

by inoculation. The object of vaccination is only to afford immunity for a time. It will not prevent small-pox in all cases, but will lessen the severity of the disease. To prevent small-pox, there must be a large number of health centers everywhere. People must be instructed about the evils of this contagious disease through handbills. Health centres must arrange to give health lectures every now and then. District Health Officers must take necessary arrangements to prevent this with the help of the public. These are the suggestions I can give. By following these measures, we can easily escape attacks from this terrible disease.

The Mouth Condition and Malignant Disease

—By Dr. S. K. Gupta, B.D.Sc.—
(Ambala Cantt.)

NO ONE can controvert the fact that malignant disease is the greatest scourge of mankind to-day.

Treatment at the present time can only be palliative or, at the most, temporary; no cure in the true sense of the word has yet been found. Perhaps one of the most important factors in malignant disease is that by the time any definite symptoms are noticed the disease is far advanced, and in a large number of cases, beyond operation. It seems that an early diagnosis is essential for successful treatment of this condition, whether operative or therapeutic.

Another indisputable fact is that Pyorrhœa is the biggest dental scourge to-day, and as neither pathology nor physiology is haphazard, but confirms to definite laws, it will be interesting to see whether there are common factors behind these two big disease entities.

The first fact which strikes one in both malignant and dental disease is the age; both are common from forty years upwards, although in recent times both occur even earlier.

Common Medium.— Another important fact, according to the recent research work of Brahmer, in Germany, is that as regards the blood reaction, both require an alkaline medium in which to develop. The latter factor may be open to objection by the dental profession, but it must be stated that it is my strong belief that the basic factor behind Pyorrhea is a tendency to an alkalosis.

Inspite of the fact that the work of Brahmer has been subjected to doubt, his findings are too significant to be thrust aside without further investigation.

One other factor of interest which also has a significance is the large number of malignant cases found to be suffering from Pyorrhoea. Here then we have two big disease entities, one general, the other dental, with several important features common to both, the biochemical factor of an alkalosis being the most important of all from the point of view of investigation.

When it is realised that the dental profession have been satisfied with the local fermentation theory of caries for years, and apparently still are, it is surely not too much to ask that at least some notice should be taken of two big disease factors, linked by sound bio-chemical phenomena.

The significance of the connection between malignant disease and Pyorrhoea is that the oral condition may be utilised as a very valuable early diagonosis of at least a malignant soil, if not of the disease itself.

The bio-chemical factor in dental disease is the only sound scientific basis on which to work today, and therefore it would be the chief concern of the Dental Surgeon to note from the condition found in the mouth any upset in metabolism present in the patient.

It is from the latter point of view that the oral diagonosis of an alkalosis by the dental surgeon, and the reporting of this condition to the doctor may have far-reaching results in the early diagonosis of malignant disease.

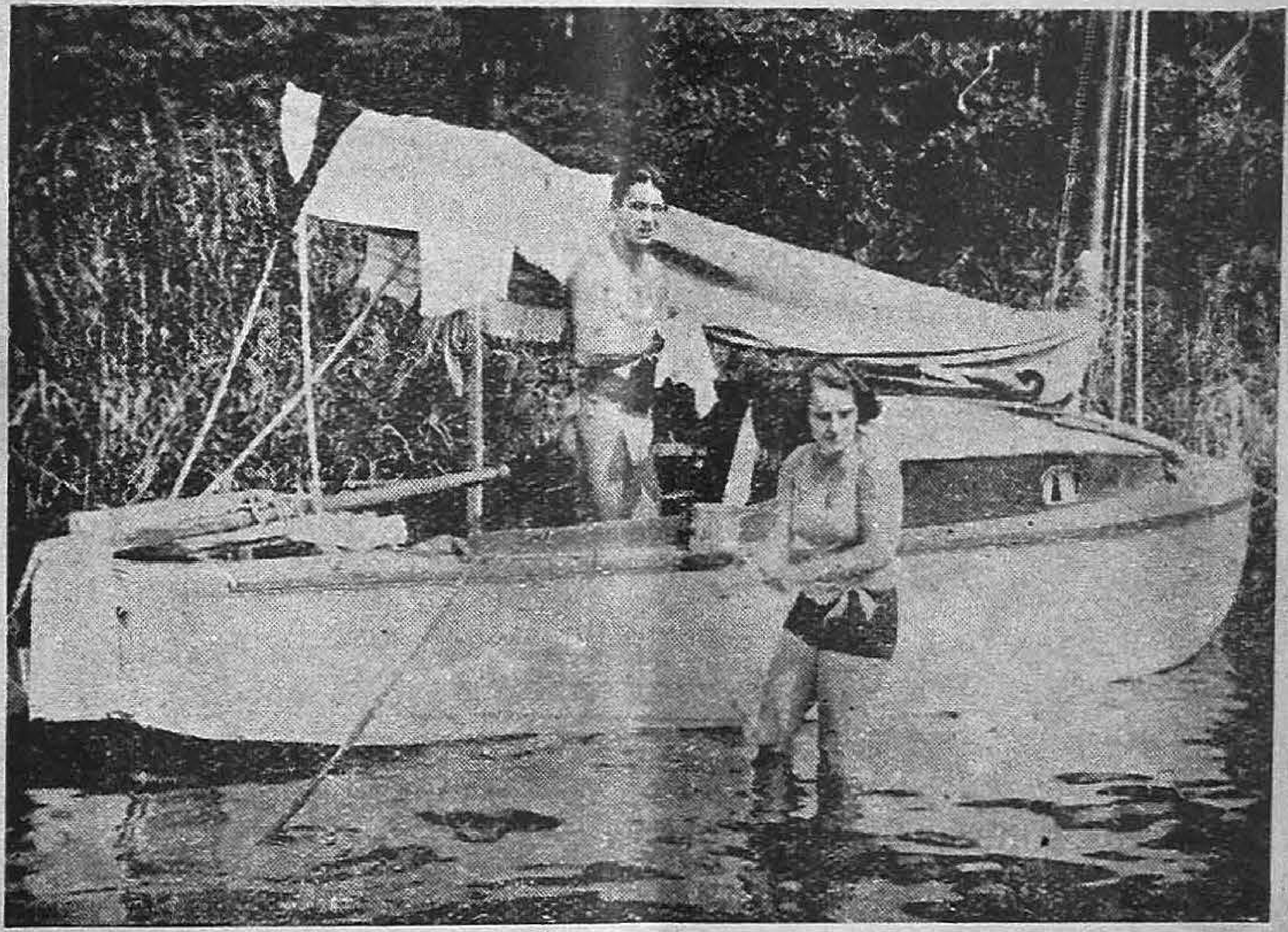
Effect of Physical Education on Body and Mind

— By K. Arumanayagam, —

Physical Instructor, Government Training-School for Women, Palace Tanjore.

"ALL work and no play makes Jack a dull boy" is a true saying. Health is related to all phases of life. Health is the foundation of an efficient and happy existence. A healthy population is a nation's asset or property. Good health is largely dependent upon daily practice of hygienic ways of life. To acquire good health, exercise is very essential. Exercise is beneficial to both sexes and at all ages. Physical Exercise has always been and still is, necessary to human beings for health, efficiency and longevity. It is indispensable to every modern individual especially to a girl or a woman, so that she may protect herself, her community and her nation. It is as necessary to life as wholesome food, pure water, open air and sunshine.

In the past, Physical Education had not been given its proper place, in the general scheme of education. Now the state of affairs is fortunately changing, but still there are difficulties to over-come, especially in the case of women. Now nearly all the schools have compulsory primary education. When physical education was newly taught in schools many old fashioned people thought that it was not in keeping with the modesty



A joyful week-end in Germany. Swimming, Yachting and Canoeing are the proper recreations during the hot summer days of the year.

of the Indians. But now they realize the value of it and see the improvement in health in their own youngsters.

What is Physical Education? It is not only games and drill, set apart during the school time, in the timetable, as some people think. It is more than that. It includes folk dancing, *Bharathanattiyam*, free play, swimming, running, jumping, walking, tree-climbing, falling down, rolling on the ground, mountain-climbing, kitchen work etc.

Most people die about 25 to 50 years earlier than their allotted time, because they fail to take sufficient physical work, and keep their bodies thoroughly active.

Physical Education has three-fold effects.

(1) Physical; (2) Mental; (3) Moral.

It not only provides the aspect of hygienic practice, but indirectly encourages the establishment of good habits. The object of it, is to help in the production and maintenance of health in body and mind. It is necessary to the development, not only of the body, but also of the brain and character.

To produce physical or hygienic effect, the muscles of the body, especially the big muscles such as trunk, legs etc., must be exercised thereby increasing circulation, the rate of respiration and stimulation of internal organs. The exercise strengthens the digestive system, develops the lungs and invigorates the nervous system. It improves the colour and function of the skin and reduces extra fat, and will remove kidney trouble.

With regard to sensory organs and nerves the most sensitive type of life on earth, are those with most perfect sensory organs. Plants are less sensitive than animals, and lower animals are less sensitive than higher animals. This is also shown in various parts of the human body. The organs which perform the greatest amount of movement are most sensitive, for example, tongue, index finger etc. What then is the relation of physical education to the brain and mind?

It is through activity, the foundation of brain is laid. Because of the close relation of finer muscles to intelligence, the brain gets tired soon, for example, a child will run and play for a long time without fatigue, but becomes quite tired after an hour of violin practice or reading. The secret of human power and health resides in the nervous system. So work or exercise not only improves the general system, but directly stimulates the nerve centres.

Moral Value

Games:—Every normal child enjoys games. In addition to the recreation value, they are important because of the opportunities for mental and moral development which they offer. They are excellent in character-building.

1. A fair play demands honesty: A father may teach his daughter to be honest, in her word and deed, but unless the child picks it up in the games-field, it looks impossible.

2. Co-operation, initiative, courage, self-control, self-confidence, self-sacrifice and other desirable qualities are developed. No one develops courage without doing things which require courage.

3. They also teach unselfishness. The girl tries to win a name not for herself alone, but for the whole team, class, school or town.

4. The child is taught implicit obedience to the rules of games, which in after life, results in implicit obedience to the rules of Society.

5. A certain amount of determination and firmness of will are influenced and acquired by playing games.

6. It improves also posture. Is it possible for one to think of very high thoughts with the posture? A man with a strong will, usually sits upright, and walks with more or less upraised head. A straight figure demonstrates self-control and confidence. It is a true fine saying 'A man is as strong as his back'.

Just a word before I conclude. It is also well-said "It is better to wear out than to rust out". Use your muscles and limbs freely every day, regularly and systematically and see how your health improves.

Exercise is the foundation of healthy life and will be of incalculable benefit to you throughout your life. It will, in short, unlock the door to glorious health, strength and efficiency, which God intended for you.

Prevention of Influenza

— By a Vegetarian Physican —

An infectious disease—like Influenza—is due to two factors—the seed on the one hand and the soil on the other. In the case of Influenza, we cannot absolutely prevent an attack, but we can lessen its probability by attention to both the seed and the soil.

The seed in the case of Influenza is one or more micro-organisms which enter the human body by way of the nostrils, the mouth, and probably the eyes. They are conveyed from one person to another by small drops of saliva. The person who infects others may, or may not, be then suffering from Influenza. In the latter case, he or she is called a "carrier," because he carries these micro-organisms. Therefore, during an epidemic, it is advisable to avoid public meetings, concerts, theatres, etc., and all offices, factories, living-rooms, bedrooms, etc., should be well ventilated.

The soil is the human body, and is probably the more important of the two factors. Therefore, during an epidemic (but preferably before), keep it fit and healthy, so that it is a soil in which the fore-going micro-organisms cannot thrive. Live out-of-doors as much as possible and always in pure moving air. Impure, motionless, air is a factor in the causation of disease. Take a daily bath, and plenty of exercise in the open-air, and keep the bowels well open. Eat only suitable food which contains a sufficiency of all vitamins and food salts, in an undamaged state. This can be secured by raw green salads and raw fruit daily. See to it that the food contains a fair supply of protein.

And, above all, avoid—as far as possible—cooked, complex sophisticated and manufactured foods. Instead, eat those foods taken immediately from their natural source, and, as far as possible, in their

natural condition. Examples of the former are: all puddings, jams, tinned and bottled foods, bread, sugar, biscuits, pickles, chutney, pasteurized and sterilized milk. Examples of the latter are: Bran, apples, pears, figs, dates, salads, eggs, milk direct from the cow, nut kernels from the shell, olive oil.

Since eyes, nostrils and mouth are portals of entry of the fore-going micro-organisms, keep them healthy. Avoid much reading, sewing, etc., especially in artificial light. If the eyes become red and congested, bathe them in milk which has been heated to boiling and then cooled to a tepid warmth.

Keep the nostrils and mouth healthy by avoidance of tobacco and by attention to the teeth. Practise deep breathing daily in the open air; inspire through the nostrils and expire through the mouth. But if the nostrils and mouth are unhealthy or become so, then gargle with a weak solution (1 in 4,000) of potassium permanganate in warm water which contains ordinary table salt also dissolved in it in the proportion of one teaspoonful to the pint.—O. D.

Topics of Interest from Health Periodicals

The New Milk Test.—Three grades of milk are officially recognized by "designation": 'Tuberculin Tested' and "Accredited" milks are raw milks; and "pasteurized milk" is milk that has been specially treated by heat.

In the case of Tuberculin Tested milk, cows which do not pass a periodical tuberculin test must be removed from the herd, and, in addition, these herds and also those licensed for Accredited milk are periodically examined by veterinary surgeons. The special process prescribed for pasteurizing milk kills any disease-producing germs which may have entered the milk, whether from animal or from human sources, and does not appreciably detract from the nutritional value of the milk. Of the three grades pasteurized milk is, therefore, the safest.

There are also prescribed, for all three grades, bacteriological tests which concern not the safety but the cleanliness and the keeping quality of the milk. So far, these tests have been of two kinds. One, the "plate-count" test, has as its object the estimation of the total number of bacteria in the milk, a limit being placed to the number which may be present in a cubic centimetre of milk. The other is a test for the presence of "Coliform" bacilli which, if the milk is to comply with requirements, must be absent from stated quantities of the milk.

There are technical objections to the value of both these tests, and a further difficulty has arisen from the recent great increase in the number of licensed milk producers. A simple and cheaper method of checking the

cleanliness and keeping quality of the milks has therefore been wanted.

Accordingly from January 1, 1937, the "plate count" test will no longer be used either for Tuberculin Tested or Accredited milk. Instead, the "methylene blue" test will be employed. In order to pass this test, milk must not under prescribed conditions decolorize methylene blue within 4½ hours if the sample is taken between May 1 and October 31, or within 5½ hours if the sample is taken between November 1 and April 30. The coliform test is retained as an additional test for both these milks: and as the methylene blue test is not suitable for pasteurized milk, the plate count test will still be used for this grade.—*Home and Country.*

General Treatment of acute Infantile Diarrhoea.—When a baby is seen in a collapsed condition, hot mustard bath (Temperature 100° to 105°) is given without a moments' delay. He is then wrapped in warm blankets, with hot water bottles round him. No food is given for one to three days as the condition of the case may require, but frequent sips of simple plain water are given. Two or three drops of brandy or whisky are found useful in the prevention of vomiting.

The first and foremost duty in such a case is to stop milk. The choice of food lies between albumen water, barley water and rice water. The first is the most useful in severe cases for it is easily retained and less irritating to the bowel. But where even albumen water is vomited, plain water is given in sips, as the urgent need of the infant with severe diarrhoea and vomiting is for fluids. Rice water is preferable to barley water on account of its being less laxative. The feeds should be given in very small quantities and at the interval of half to one hour. Complete rest is of immense benefit.—*Medical Digest.*

A word about raw diet.—The word 'raw' diet has unfortunately a bad odour about it. It is really not raw, as the name implies. It is 'sun cooked' as distinct from 'man cooked'. The mango, the orange and the papaya extract their sweet and delicious taste, from the elements—sun, water and air. The same is the case with nuts (cocoanut, almonds, walnuts, ground nuts). These nuts are best eaten raw. They can never be improved by cooking. Even some vegetables like the cucumber are better enjoyed in the uncooked state. Our tongues, accustomed as they are to cooked lifeless food for generations, require to be trained to enjoy the sweet taste of uncooked food. Such foods as are not palatable in the raw state may be omitted in raw diet. Persons taking to raw diet for the first time in their life, may feel weak but as they regulate the choice and quantity of raw foods they should take, they will surely feel light and more energetic on raw diet. It is not so much the quantity that counts as the roughage that the raw food contains. It is this roughage that remains in fact in raw foods, that induces peristaltic contraction in the sluggish bowels of a constipated patient and brings about a thorough evacuation of the bowels. The following are some of the points that should be borne in mind in taking raw diet.

Foods rich in proteids, (pulses and nuts) and fats should always be taken

in small quantities. Soft foods like the plantain and sapota with little or no roughage in them should also be sparingly taken. Juicy fruits like the orange and mango may be indulged in, in comparatively large quantities. —(*The Indian Naturopath*).

The Natural Treatment of Pneumonia.—*Dr. R. Habicht*, R. Hess Hosp. Dresden. (Hippokrates, No. 42, 1936.) .. Strict rest in bed on an open verandah or at least with windows wide open even in winter and during the night. The patient should sit up and talk as little as possible. Compresses only on the front, the chest and abdomen, and on the calves. No food but fresh fruit juices or nothing but cold tea or water; thorough evacuation of the bowels with the help of laxatives (Hamburger tea) and 1—2 enemas daily. Rapid tepid and later on cool sponging of parts or the whole front of the body (without sitting up) every 2 hours, after which the body should be brushed dry. Wet packs (without impermeable covering)on the abdomen, calves and forearms have a derivative and absorbing effect. By its surface evaporation the compress produces a capillary suction outward it sucks, so to speak, at the pores of the skin (at first the compresses smell unpleasant when they are changed but not later). In more severe cases mustard packs. All these measures should be agreeable to the patient. As long as the temperature is rising and the patient shivers, the application of heat is indicated, thus hot packs (hot oil packs for the stabbing pain in the chest!), heating pads or-light, hot water bottles etc. When, however, the fever has reached the highest point and the patient begins to sweat, he should be treated with cold packs, cool sponging, air baths etc. In cases of doubt whether treatment with cold or heat is preferable, the patient's subjective feeling is decisive. Immediately after defervescence breathing exercises; when the appetite returns,, first two days of strict raw diet, then two days on a mild raw diet, afterwards a vegetarian diet. For promoting absorption, baths of the forearms, increasing in temperature according to *Hauffe-Schweninger's* suggestion, later baths in which the skin should be rubbed with a brush, Kneipp douching with alternating cold and hot water, sun baths. —*Ars Medici.*

Action of Raw Apple Pulp in Summer Diarrhœa.—About five years ago Bittner began using the apple treatment in all adults and children suffer- from intestinal infections. In 946 patients less than 10 years of age in whom severe diarrhoea was a symptom there was only one death under apple therapy. In this case meningeal symptoms were present at the time treatment was started. Previous conceptions regarding the action of apple pulp on the intestinal tract must be revised entirely. The accepted theory that bulk and roughage are irritating to the intestine and stimulate peristalsis must be excepted in the case of apples, as the action of this bulk on the intestinal tract is soothing and decidedly constipating even to the highly inflamed and irritated intestine of young infants suffering from severe dysentery. There are definite rules that must be followed if the best results are to be obtained. The apples must be eaten on an empty stomach, they must be finely chewed, they must have sufficient time to leave the stomach before being mixed with other

foods, foods of high protein content seriously minimise the effect of the apple and in seriously acute cases will absolutely neutralise the beneficial effects expected, and cooking temperature greatly impairs the therapeutic value of apples. It is the author's belief that the action of apple pulp is not one of a germicidal nature but that it is entirely one of absorption of the toxic effects of bacterial invasion. He believes that the only effect apple pulp has on the intestinal flora is that of removing exotoxic products of bacterial growth, thereby relieving the system from the absorption of these products and allowing the blood stream defences to concentrate directly on the bacterial invasion. In other words, the action is similar to the drainage of an abscess.—*I. A. Manwille, Elizabeth M. Bradway and Avoca S. McMinis, Northwest Medicine, Dec., 1936, p. 441.—Medical World.*

Methods of Destroying Bed-Bugs.—Kenneth Mellanby — Experiments show that dilute methylated spirit kills bed-bugs. A mixture of 30 parts of spirit with 70 parts of water has a low surface tension, so that it penetrates readily into the cracks which the insects inhabit. Practically every adult and nymph which the liquid touches dies; those in the cracks where the fluid remains for some time before it evaporates are all killed. Small nymphs are particularly susceptible; in fact this stage often dies if wetted with ordinary water. Eggs are more resistant than other stages, but eggs in the cracks which remain wet for an hour seldom survive.

This insecticide is very cheap; for if duty-free spirit can be used the mixture costs about sixpence a gallon. It is not inflammable (50 per cent, spirit kills eggs more readily, but is inflammable), it gives off no noxious fumes, and, most important of all, it does not damage furniture or bedding.

This method will not kill every bug in a house, but if the liquid is sprayed into the crevices few bugs will survive and the house will be made much more comfortable for the inhabitants. A second application after any eggs which escaped have hatched should leave almost none of the parasites alive. When fumigation and other methods have been perfected, this sort of treatment will not be necessary; but, until then, use should be made of any practicable means of alleviation.—*Lancet.*

Larger Hips.—After having made a recent study of feminine fashions, an American Commission reports that the hips of women are larger than they used to be. The reason given is that women sit down too much, causing their hips to spread one and one-half inches.

Sitting down too much, together with riding too much, undoubtedly has had an influence on the shape of both men and women.

Most of us lead unnatural lives today. We do a lot more sitting than did our forefathers and foremothers, and our walking is limited to the distance between the house and the garage. Not only bulging hips but bulging abdomens would be reduced if we did more vigorous walking and not so much languorous sitting. Brisk walking is one of the best all-round exercises known, and is available to most of us, and at a very low cost, too.—*Oriental Watchman.*

Axioms for healthy mother-hood.—

1. *Home condition.*—The relations between husband and wife should be happy and based on mutual attraction and respect.

2. *Reasonable intervals between confinements*—Few women can face incessant child-bearing with adequate strength of mind and body in each case There should therefore be a reasonable interval between the birth of one child and the next

3. *Means*—Adequate means ensure a suitable and sufficient supply of food for the pregnant and nursing mother, help with her daily work and leisure for rest and recreation.

4. *Good housing* — The family should be housed in a dry, well ventilated, well lit house with efficient public services and, if possible, a garden.

5. *Good doctoring and nursing*—A higher standard in both these professions is constantly sought. The state should not grudge money for the training of doctors and nurses in midwifery, but should ensure that the maximum of medical skill is available for mothers.

6. *Freedom from worry* — If the foregoing conditions could be attained. much anxiety and nerve strain should be removed from the home. It is the duty of the community and the family to relieve the mother, at the time of child-bearing, of as much anxiety and petty worry as possible.

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Prevention of Finger-Sucking.—

Dr. W. Reihn, Paediatric Inst., Hannover, (Kinderarztl. Rraxis, No. 9, 1935.) *E. Zinner's* "Russka feeler glove" is recommended by the author. This is made of material which can be washed boiled. At the end of each finger, there is a soft rubber band, well worked into the material, and from this there are rubber projections 3 cm. long made of soft rubber, like feelers. When the child tries to suck, these feelers get in the way, as they can be licked. The children get to like these gloves very soon, and play with them, forgetting the desire to suck. They should be worn for weeks and months after the child has stopped wanting to suck its fingers, in order to prevent a relapse. The author points out the prophylactic value of the gloves, inasmuch as finger sucking may have an unfavourable influence on the development of the jaw, and of the first and second teeth. The gloves may be obtained from the Strahlenhandschvertrieb, Hannover.—*Ars Medici.*

* * *

If thou to health and vigour wouldst attain,
Shun weighty cares—all anger deem profane,
From heavy suppers and much wine abstain,
Nor trivial count it, after pompous fare,
To rise from table and to take air.
Shun idle, moonday slumber, nor delay,
The urgent calls of nature to obey.
These rules if thou wilt follow to the end,
Thy life to greater length thou mayst extend.—*Lancet.*

"They are as sick that surfeit with too much as they that starve with nothing".—*Shakespeare (Merchant of Venice).*

* * *

Literary pursuits employ youth, give pleasure to old age, make prosperity more prosperous, are a refuge and a solace in sorrow, amuse us when at home, do not hinder us in our duties abroad, make our nights less lonely, and in our travels and sojournings are our constant companions.—*Cicero*

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Emotional Factors in Disease.—As Cannon points out: "An emotional disturbance affecting the alimentary canal is capable of starting a vicious circle; the stagnant food, unprotected by abundant juice, naturally undergoes bacterial fermentation, with the formation of gases and irritant decomposition products These in turn may produce mild inflammation or be absorbed as substances disturbing to metabolism, and thus affect the mental state. The importance of avoiding as far as possible, the initial state of worry and anxiety, and of not permitting grief and anger and other violent emotions to prevail unduly, is not commonly understood, for the subtle changes wrought by these emotional disturbances are not brought to consciousness. Just as feeling of comfort and peace of mind are fundamental to normal digestion, so discomfort and mental discord may be fundamental to disturbed digestion."—*Medical World.*

Scout Life and its Significance.—S. Hryniewiecki, Zycie Dziecka 4 : 8 (Jan.) 1935.

Poland realizes the value of scout life (*Harcerstwo*) for its school children. The program of the nation is to have 80 per cent of the school children belong to the organization of scouts. In Poland this organization is controlled by the government, which encourages the public to support the movement to the limit, because the benefits that the child derives are enormous. Scouting moulds character, stimulates ambition, teaches responsibility. In other words, the child profits physically, mentally and spiritually. Scouting is the school which develops active future citizens; therefore, it should be supported by all.—*Krupinski, Chicago.*

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Warning Advice.—On the question of preventing baldness the medicos are not silent, but far from reassuring. Begin to treat the hair as soon as the thinning tendency becomes apparent, advices the *Journal of the American Medical Association*:

"The general health should be kept at the highest possible plane. Overwork, particularly mental, or overplay and bad hours should be avoided. A soft, light hat or none at all should be worn. The patient should not wet his scalp daily in order to comb his hair easily, but should brush the dry hair vigorously for ten minutes once a day and massage in ointment or lotion at another time for ten minutes."

Hair has no roots. The hair-shaft grows from a socket in the scalp. The

vital growing part is a stand of cells fastened to its lower end. As the hair grows, it gets old, tends to fall out naturally after a few months. But a new hair will replace it provided the vital cells are undamaged. About forty old hairs normally fall daily from a healthy scalp.—*The Medical News.*

Essential Rules of Health for an Adult.—Your health is your bank balance in the "Bank of life." Daily wear and tear of living tends to deplete this bank balance. To safeguard it against depletion, make daily bank deposits in terms of plenty of regular sleep, rest, fresh air, recreation, external and internal cleanliness, regular meals with wholesome foods, emphasizing fresh fruits, green vegetables and dairy products. Check up this bank balance with periodic health examinations.

The laws of health demand that you pay as you go. When you speed, you squander. Keep the wear and tear of living within your health budget. Practice rigid health economy.

Youth speeds along the open highway of health, but the adult is driving in the congested traffic of increasing health hazards. Therefore, obey the traffic laws of adult health. Slow down to moderation in all things, and don't crash the red lights of physical and mental excesses.—*Bulletin of the Academy of Medicine of Cleveland Ohio.*—*Medical World.*

Book Reviews

The Seven Circles Round Childhood —*By Walter S. J. Peiris*, M.R.C.S., (Eng.), L.R.C.P., (Lond.), Moratuwa.

The author puts the problem of the child in a nut-shell in this tiny volume and points out that for the proper development of the child, physical, mental, moral, intellectual and spiritual, he will have to depend upon the mother, the father, the home, the school, the Local Government Body, the Public and the State. The mother has been rightly assigned the first place, and the first four *viz.*, the mother, the father, the home and the school exert their influence directly on the child, while the remaining three, indirectly. In this book, the author has attempted 'to indicate the duties of the various agencies that are concerned with the welfare of the child and which exercise a controlling influence on child care, growth, development, education and protection'. This book will prove of inestimable value to the officers and subordinates of various Local Bodies and Maternity and Child Welfare Centres. This book of 146 pages is neatly printed and contains an index at the end. Copies can be had from Messrs. Cargills Ltd., Messrs. H. W. Cave & Co, and Messrs. The Colombo Apothecaries Ltd., Colombo, @ Rs 2/- or from Mr. V. C. Kannan, Pharmacist, Moratuwella, Moratuwa @ Rs. 2/- post free.